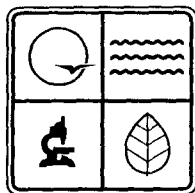


STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**  
MISSOURI AIR CONSERVATION COMMISSION



**PERMIT BOOK**

## PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **01 2 006 - 016** Project Number: **2005-12-002**

Owner: **Bunge North America, Inc.**

Owner's Address: **11720 Borman Dr., St. Louis, MO 63830**

Installation Name: **Bunge North America, Inc.**

Installation Address: **Riverfront St., Caruthersville, MO 63830**

Location Information: **Pemiscot County, S16, T18N, R13E**

Application for Authority to Construct was made for:

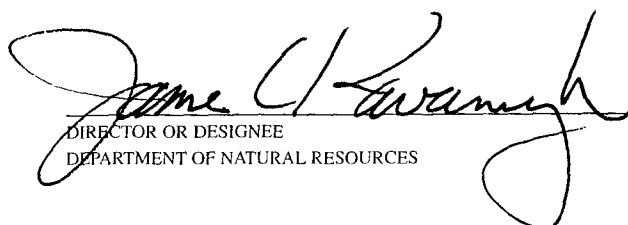
Installation of a grain dump pit #2, scale and conveying equipment (EP-12), a 550,000 bushel grain storage bin (EP-11), replace existing dust control device (CD-4), and modify internal handling equipment (EP-4). This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required.*

☐ Standard Conditions (on reverse) are applicable to this permit.

☒ Standard Conditions (on reverse) and Special Conditions (listed as attachments starting on page 2) are applicable to this permit.

**JAN 27 2006**

EFFECTIVE DATE

  
DIRECTOR OR DESIGNEE  
DEPARTMENT OF NATURAL RESOURCES

## STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

**You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review.** Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional Office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed Special Conditions as provided in RSMo 643.075. If you choose to appeal, the Air Pollution Control Program must receive your written declaration within 30 days of receipt of this permit.

If you choose not to appeal, this certificate, the project review, your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Department of Natural Resources has established the Outreach and Assistance Center to help in completing future applications or fielding complaints about the permitting process. You are invited to contact them at 1-800-361-4827 or (573) 526-6627, or in writing addressed to Outreach and Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention Construction Permit Unit.

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Permit No.	
Project No.	2005-12-002

## SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

*The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."*

Bunge North America, Inc.  
Pemiscot County, S16, T18N, R13E

1. Emission Limitation
  - A. Bunge North America, Inc. shall emit less than 15 tons of particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) in any consecutive 12 month period from emission points listed in Table 1.
  - B. Bunge North America, Inc. shall maintain an accurate record of PM<sub>10</sub> emitted into the atmosphere from emission points listed in Table 1. Attachment A or an equivalent form shall be used for this purpose. Bunge North America, Inc. shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
  - C. Bunge North America, Inc. shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 1.B. indicate that the source exceeds the limitation of Special Condition Number 1.A.
2. Control Device Fabric Filter
  - A. Bunge North America, Inc. shall control emissions from the grain dump pit #1 (EP-02), internal operations (EP-04), grain dump pit #2 (EP-12) using fabric filter CD-4 as specified in the permit application. The fabric filters shall be operated and maintained in accordance with the manufacturer's specifications. The fabric filters shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the DNR employees may easily observe them. Replacement filters shall be kept on hand at all times.
  - B. Bunge North America, Inc. shall monitor and record the operating pressure drop across the fabric filters at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

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Permit No.	
Project No.	2005-12-002

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

- C. Bunge North America, Inc. shall maintain an operating and maintenance log for the fabric filters which shall include the following:
  - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
  - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (5) REVIEW

Project Number: 2005-12-002  
Installation ID Number: 155-0063  
Permit Number:

Bunge North America, Inc.  
Riverfront St.  
Caruthersville, MO 63830

Complete: December 1, 2005  
Reviewed: December 16, 2005

Parent Company:  
Bunge North America, Inc.  
11720 Borman Dr.  
St. Louis, MO 63830

Pemiscot County, S16, T18N, R13E

REVIEW SUMMARY

- Bunge North America, Inc. has applied for authority to construct a grain dump pit #2, scale, and conveying equipment (EP-12), a 550,000 bushel grain storage bin (EP-11), and modify existing dust device (CD-4) and internal handling equipment (EP-4).
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.
- Subpart DD of the New Source Performance Standards (NSPS) does not apply to this grain terminal elevator since permanent storage capacity does not exceed 2.5 million bushels.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- A fabric filter is being used to control the particulate matter less than ten (10) microns in diameter (PM<sub>10</sub>) emissions from the equipment in this permit.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM<sub>10</sub> are conditioned below de minimis levels.
- This installation is located in Pemiscot County, an attainment area for all criteria air pollutants.
- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

- Ambient air quality modeling was not performed since potential emissions of the application are conditioned below de minimis levels.
- Emissions testing is not required for the equipment.
- A revised Intermediate Operating Permit is required for this installation within 30 days of equipment startup.
- Approval of this permit is recommended with special conditions.

## INSTALLATION DESCRIPTION

Bunge North America, Inc. operates a grain-handling installation located in Caruthersville, Missouri (Pemiscot County) that has a storage capacity of 1.9 million bushels of grain. The installation receives grain by truck, and ships grain primarily by barge, but also by truck. The original concrete storage house and two (2) truck-receiving pits (rice dump pit and grain dump pit #1) were constructed in the early 1960's. An additional concrete storage house and an additional truck-receiving pit were constructed in 1970. The column grain dryer was constructed in 1977. A large steel storage bin was constructed in 1980. The existing installation has received one previous construction permit (082001-024) from the Air Pollution Control Program detailing the additional burner in the dryer. The installation submitted an intermediate state operating permit application received November 7, 2002, which currently awaits technical review. Since the installation is limited to less than 100 tons per year of any criteria pollutants, the installation is considered a minor source for construction permits.

## PROJECT DESCRIPTION

Bunge North America, Inc. has applied for authority to construct a grain dump pit #2, scale, and conveying equipment (EP-12), a 550,000 bushel grain storage bin (EP-11), and modify existing dust control device (CD-4) and internal handling equipment (EP-4). The new grain dump pit (EP-12) is rated at 20,000 bushels (580 tons) per hour. The additional 550,000 bushel storage bin increases permanent storage to 2.45 million bushels. Modifications to the internal handling include replacement of fabric filter (CD-4) with a larger fabric filter designed to control emissions from grain dump pit #1 (EP-02), internal operations (EP-04), and grain dump pit #2 (EP-12).

Table 1: New project emissions points and emission factors used.

Emission Point	Description	MHDR	Emission Factor	Control Device
EP-04	Internal Handling Reclaim	1450 ton/hr <sup>1</sup>	0.034	CD-4 Bag House
EP-10 <sup>2</sup>	Increased Haul Road Usage	9.28 VMT/hr	1.74	None
EP-11	550,000 Bushel Storage Bin	580 ton/hr	0.0063	None
EP-12	Grain Dump Pit #2	580 ton/hr	0.0078	CD-4 Bag House

<sup>1</sup> Internal handling MHDR is based on multiple transfer points as provided by applicant.

<sup>2</sup> Only the emissions from the increased vehicular miles traveled (VMT) are included herein.

## EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 9.9.1 *Grain Elevators & Processes* (5/03). Existing potential emissions are from the previous permit (082001-024). Existing actual emissions are from the 2004 Emission Inventory Questionnaire (EIQ). Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). The following table provides an emissions summary for this project.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2004 EIQ)	Potential Emissions of the Application	New Project Conditioned Potential
PM <sub>10</sub>	15.0	281.50*	3.58	102.31	< 15.0
SO <sub>x</sub>	40.0	0.05	0.00	0.00	N/A
NO <sub>x</sub>	40.0	7.63	0.05	0.00	N/A
VOC	40.0	0.42	0.00	0.00	N/A
CO	100.0	6.41	0.04	0.00	N/A
HAPs	10.0/25.0	0.14	0.00	0.00	N/A

N/A = Not Applicable

\* Existing potential emissions are limited to below 100 tons per year via an operating permit.

## PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM<sub>10</sub> are conditioned below de minimis levels.

## APPLICABLE REQUIREMENTS

Bunge North America, Inc. shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

### GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110  
The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required April 1 for the previous year's emissions.

- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-3.090

#### SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400

#### STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

\_\_\_\_\_  
Michael Sanchez  
Environmental Engineer

\_\_\_\_\_  
Date

#### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated November 30, 2005, received December 1, 2005, designating Bunge North America, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Southeast Regional Office Site Survey, dated December 12, 2005.



## Attachment A – Particulate Matter (PM<sub>10</sub>) Compliance Worksheet

Bunge North America, Inc.  
Pemiscot County, S16, T18N, R13E  
Project Number: 2005-12-002  
Installation ID Number: 155-0063  
Permit Number: \_\_\_\_\_

This sheet covers the period from \_\_\_\_\_ to \_\_\_\_\_.  
(month, year) (month, year)

Copy as needed

[illegible]

Column 1: Total amount of grain received in grain dump pit #2 during month.

Column 2: Composite PM<sub>10</sub> emission factor derived from Table 1.

Column 3: Column 1 x Column 2 x 0.0005.

Column 4: Sum of last 12-months of Column 3\*.

**\*A 12-Month Total PM<sub>10</sub> emissions total of less than 15 tons for Column 4 indicates compliance.**